# HISTORIC PROPERTY INVENTORY FORM

#### IDENTIFICATION SECTION

| IDENTIFICATION SECTION       |   |  | Stat   | e of vvasnington, Department of Community Development   |
|------------------------------|---|--|--|---|
| Field Site No.               | 216-U-10 <b>OAHP No.</b>                      | Date Recorded 8-Mar-99                     | Offic  | ce of Archaeology and Historic Preservation   |
| Site Name Historic           | 216-U-10                                      |  | 111  | 21st Avenue Southwest, Post Office Box 48343  |
| Common                       | U-Pond  |  |  | mpia, Washington 98504-8343 (206)753-4011   |
| Field Recorder               | Jim Sharpe                                    |  | S.y.   | 11pla, 11ashington 6666 1 66 16 (200)166 1611   |
| Owner's Name                 | U.S. Department of Energy, Richland Operation | and Office                                 | LOCATION SECTION   |   |
|                              |   | ins Office                                 |  | a.  |
| Address                      | P.O. Box 550                                  |  | Address Pon  |   |
| City/State/Zip Code          | Richland, WA 99352                            |  | City/Town/County/Zip Code  | Richland/Benton County/99352  |
|                              |   |  |  | tion 12 I/4 Section NW 1/4 1/4 Sec SE   |
| Status                       |   | Photography                                | Tax No./Parcel No.   | Acreage   |
| x Survey/Inventory           |   | Photography Neg. No. 74224                 | Quadrangle or map name Rive  | erland, WA., 1986   |
| National Register            |   | (Roll No. & Frame No.)                     |  | 11 <b>Easting</b> 298000 <b>Northing</b> 5157300  |
| State Register               |   | View of                                    | Plat/Block/Lot   | Ti Lasting 290000 Northing 3137300  |
|                              |   |  |  |   |
| Determined Eligible          |   | Date                                       | Supplemental Map(s)  |   |
| Determined Not Eligible      |   |  |  | ACCRECATION OF THE PROPERTY OF  |
| Other (HABS, HAER, N         | NHL)  |  |  | \$250 PERSONAL PROPERTY AND STREET |
| Local Designation            | •   |  |  | ROMERO CHEST AND TO THE TOTAL PROPERTY OF THE   |
|                              |   |  | - 1 (Sec.) 365(18)   | CONTRACTOR OF THE PROPERTY OF   |
| Classification               | District Site                                 | Building X Structure Object                | 200 TO MARKET - 100 TO MARKET  | AND REPORT OF THE PROPERTY AND PARTY OF THE PROPERTY OF THE PR  |
|                              | <del></del>                                   |  | 400000000000000000000000000000000000000  | CHARLES AND THE STATE OF THE ST  |
| District Status              | x NR SR                                       | LR INV                                     |  | ACCOUNT OF THE PARTY OF THE PAR  |
| Contributing                 | x Non-Contributing                            |  | A 100 PM  | 20 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1  |
| District/Thematic Nominat    | tion Name Hanford Site Manhat                 | tan Project and Cold War Historic District | AND THE PERSON NAMED IN  | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1   |
|                              | <u></u>                                       |  |  | V 100 100 100 100 100 100 100 100 100 10  |
| Description Section          |   |  |  |   |
| Materials & Features/Strue   | atural Turas                                  | Roof Type                                  | CONTROL OF THE CALL  | 50 3 3 1 1  |
|                              |   |  | Management of the control of the con |   |
| Building Type                | Industry                                      | Gable Hip                                  | CONTRACTOR OF THE PARTY OF THE  | AND 100 100 100 100 100 100 100 100 100 10  |
| Plan                         |   | Flat Pyramidal                             | THE RESERVE OF THE PARTY OF THE |   |
| Structural System            |   | Monitor X Other (specify)                  |  |   |
| No. of Stories               |   | Gambrel Open air pond                      |  |   |
|                              |   | Shed                                       | A SECTION OF THE PARTY OF THE P | Limer City  |
| Cladding (exterior Wall Su   | ırfacos                                       |  | Control of the second  |   |
|                              | inaces  | Roof Material                              |  |   |
| Log                          |   |  | 2000 CONT. CO.   |   |
| Horizontal Wood Siding       | 9   | Wood Shingle                               | WIND STREET STREET   |   |
| Rustic/Drop                  |   | Wood Shake                                 |  |   |
| Clapboard                    |   | Composition                                | A SHOW THE PARTY OF THE PARTY O |   |
| Wood Shingle                 |   | Slate                                      |  | Sept. A suspingram  |
| Board and Batten             |   | Tar/Built-up                               | 10000000000000000000000000000000000000   | 15 Part   15 Par  |
| Vertical Board               |   | Tile                                       | The second secon | PARTIES A TOTAL PROPERTY.   |
|                              |   |  | History (Charles (Charles and Charles and  | f (h - f - U  |
| Asbestos/Asphalt             |   | Metal (specify)                            | High Styles/Forms (Check one or more   |   |
| Brick                        |   | X Other (specify) Open air pond            | Greek Revival  | Spanish Colonial Revival/Mediterranean  |
| Stone                        |   | Not visible                                | Gothic Revival   | Tudor Revival   |
| Stucco                       |   |  | Italianate   | Craftsman/Arts & Crafts   |
| Terra Cotta                  |   | Foundation                                 | Second Empire  | Bungalow  |
| Concrete/Concrete Blo        | ck  | Log Concrete                               | Romanesque Revival   | Prairie Style   |
| Vinyl/Aluminum Siding        | <del>=::</del>                                | Post & Pier Block                          | Stick Style  | Art Deco/Art Moderne  |
|                              |   |  |  |   |
| Metal (specify)              |   |  | Queen Anne   | Rustic Style  |
| Other (specify)              |   | Brick X Other (specify)                    | Shingle Style  | International Style   |
|                              |   | Not visible Open air pond                  | Colonial Revival   | Northwest Style   |
|                              |   |  | Beaux Arts/Neoclassical  | Commercial Vernacular   |
|                              | (Include detailed description in              |  | Chicago/Commercial Style   | Residential Vernacular (see below)  |
| Integrity                    | Description of Physical Appearance)           |  | American Foursquare  | X Other (specify)   |
|                              | Intact  | Slight Moderate Extensive                  | Mission Revival  | Does not apply  |
| 06                           | macı  | Slight Moderate Extensive                  | IVIISSIOTI REVIVAI   | Does not apply  |
| Changes to plan              |   | $\vdash$ $\vdash$ $\vdash$                 |  |   |
| Changes to windows           |   |  | Vernacular House Types   | , <del></del>   |
| Changes to original cladding | g   |  | Gable Front  | Cross Gable   |
| Changes to interior          |   |  | Gable Front and Wing   | Pyramidal/Hipped  |
| Other (specify)              |   |  | Side Gable   | X Other (specify)   |
| (opco,)                      |   |  |  | Does not appply   |
|                              |   |  |  | υσες ποι αρρμίγ   |

#### NARRATIVE SECTION

| Study Unit Themes (check one o  | more of the following)  |  |
|---|---|--|
| Agriculture Architecture/Landscape Architecture Arts Commerce Communications Community Planning/Development | Conservation Education Entertainment/Recreation Ethnic Heritage (specify) Health/Medicine Manufacturing/Industry Military | Politics/Government/Law Religion Science & Engineering Social Movements/Organizations Transportation  x Other (specify) Manhattan Project & Cold War Era x Study Unit Sub-Theme(s) Waste Management (Liquid) |
| Statement of Significance   |   |  |
| Date of Construction  x In the opinion of the surveyor, this p  | 1943 Architect/Engineer/Builder roperty appears to meet the criteria of the National Register                             | of Historic Places.  |

The 216-U-10 Pond, also referred to as U-Pond, was locted in the 200 West Area of the Hanford Site. It was the first surface disposal system planned for the management of industrial waste waters from separations operations. It is also believed to be the longest used low-level radioactive waste disposal site on earth. The pond was in a natural depression in the southwest corner of the 200 West Area. The pond began operation in 1944 and was designed to receive waste water from various operational facilities. It was enlarged in 1955 and covered an area outside the 200 West area perimeter fence. The pond covered about 30-acres. The facility received effluents from the 284-W Powerhouse; steam condensate from the 231-Z and 234-5 Z buildings via the 216-U-14 Ditch; wastewater from the 2733-W mask cleaning station and 2724-W Laundry via the 216-U-14 Ditch; chemical sewer wastes from the 221-U Building; cooling water from the 224-U Building, 231-Z laboratory wastes via the 216-Z-1 Ditch; 241-U-110 Tank condenser water via the 216-U-14 Ditch; vacum pump seal water from 291-Z building; Hanford Laboratory waste and PNL operations waste from the 231-Z via 216-U-14 Ditch: steam condensate from the 242-S Evaporator via the 216-U-14 Ditch. The site was stabilized by backfilling in 1985.

It is the conclusion of the U.S. Department of Energy that 216-U-10, through its role in liquid waste management, is eligible for inclusion in the National Register of Historic Places under Criterion A as a contributing property within the Hanford Site Manhattan Project and Cold War Era Historic District.

## **Description of Physical Appearance**

The 216-U-10 Pond was 3720 feet southwest of 221-U, 532 feet south of 16th Street in the southwest corner of the 200 West Area. The pond was about 30 acres in size. The pond began operation in 1943 and received low level liquid effluent from plutonium processing facilities. It originally concisted of two drainage ditches, 216-U-14 and 216-Z-1, that diverted waste waters to a natural depression. The final system consisted of influent ditches, U-pond, and overflow facilities. Influent ditches transported waste waters to the pond. Originally, the pond was a seepage area at the end of the 216-U-14 and 216-Z-1 Ditches. As water discharges increased, the pond increased in size from a natural depresion to a 30 acre pond. In 1965 modifications to the pond and various physical components of the system resulted in changes in discharge sources and volumes released to the pond. The modifications included the three finger like extensions to the east side of the pond to provide increased volume and infiltration capacity. The pond contained no outlets for water and relied on percolation for water loss. It ramained active until 1985. It has been deactivated, backfilled, and stabilized.

### Major Bibliographic References

Reference Drawings: H-2-02430, H-2-05962, H-2-32527, H-2-36824, H-2-44510, Sheet 9, and H-2-22511, Sheet 55.

Bechtel Hanford, Inc., 1995, U Plant Aggregate Area Management Study Technical Baseline Report. BHI-00174. Richland, Washington.

Rockwell Hanford Operations. 1979. 200 Areas Waste Sites. RHO-CD-673 Vol. II., Richland, Washington.

x In the opinion of the surveyor, this property is located in a potential historic district (National and/or local).

Rockwell Hanford Operations. 1981. 216-U-10 Pond and 216-Z-19 Ditch Characterization Studies. RHO-ST-45, Richland, Washington.

U.S. Department of Energy, 1992. Hanford Site Waste Management Units Report. DOE/RL-88-30. Richland, Washington.

General Electric. 1959. Unconfined Underground Radioactive Waste and Contamination in the 200 Areas-1959. HW-60807. Richland, Washington.

WHC-EP-0707. 1994. 216-U-10 Pond and 216-Z-19 Ditch Characterization Studies. WHC-EP-0707, Richland, Washington.